



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

1/1

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,368	10/14/2004	Esko Olavi Dijk	NL 020311	8683
24737	7590	02/01/2008	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			NEWMAN, MICHAEL A	
P.O. BOX 3001			ART UNIT	PAPER NUMBER
BRIARCLIFF MANOR, NY 10510			2624	
MAIL DATE		DELIVERY MODE		
02/01/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/511,368	DIJK, ESKO OLAVI	
	Examiner	Art Unit	
	Michael A. Newman	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 14 October 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/10/2005.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - a. The independent claim 1 requires extracting specific frequency components from an external light source incident on a light sensor and determining the presence of an external display screen upon successful extraction of frequency components characteristic for a display screen. Claim 2 then recites "embedding an identifier for the device in an output signal to be displayed on a display screen." It is unclear as to whether the display screen referred to in claim 2 is the external display screen whose presence is detected in claim 1 or an additional display screen. Consequently it is also unclear as whether the output signal is the output by the external display or by the device detecting its presence. As such, the claim fails to clearly set forth the limitations of the claim and is indefinite.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 7 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Koplar et al. (U.S. Patent No. 7,213,254).

a. Regarding claim 1, Koplar teaches a device arranged for context-aware operations, comprising a light sensor for registering incident light originating from an external light source (**Col. 16 lines 27 – 29**), coupled to filtering means (**Col. 16 lines 30 – 38**) for extracting specific frequency components from the registered incident light which are characteristic for a display screen (**Col. 16 lines 47 – 52**), determining means for determining the presence of an external display screen upon successful extraction of the specific frequency components by the filtering means (**Col. 16 lines 57 – 66**), and processing means for adjusting operation of the device in dependence on the output of the determining means (**Col. 17 lines 18 – 26**) [**See Col. 5 line 47 – 67 and Col. 6 lines 39 – 41 for a conceptual overview**].

b. Regarding claim 7, Koplar teaches the device of claim 1, in which the determining means are arranged for obtaining information regarding the position of the external light source from the extracted frequency components (**Col. 11 line 63 – Col. 12 line 5**) [**Note that in order to activate the ‘aiming light’,**

clearly the device has to determine whether it is in the general location of the external display device].

c. Regarding claim 8, Koplar teaches the device of claim 1, in which the processing means are arranged for wirelessly broadcasting a communication request in response to detecting the presence of the external light source (Col. 9 lines 39 – 41, lines 59 - 61 and Col. 10 lines 63 - 65) [Note that the data input means are monitored to detect any incoming transmissions, and for certain applications, it can use a RF antenna to transmit feedback to a transmitter device].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 2, 3, 4, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koplar et al. (U.S. Patent No. 7,213,254) in view of Jacobs et al. (U.S. Patent No. 5,815,127). Hereinafter referred to as Koplar and Jacobs respectively.

a. Regarding claims 2, 3 and 4, Koplar teaches all the limitations of the independent claim 1, as set forth in the 102 rejection of claim 1 above. Koplar further suggests displaying a numeric code, such as the serial number of the hand-held device, in a point-of-sale application (**Koplar Col. 7 lines 14 - 16**), and modulating the luminance component of the television signal to embed the auxiliary information (**Koplar Col. 18 lines 32 – 45**). However, **Koplar fails to teach** an embedding means for embedding an identifier for the device in an output signal to be displayed on a display screen. **Pertaining to the same field of endeavor, Jacobs teaches a similar system for transferring information to a portable device by detecting an external display's video signal containing information embedded by modulation. Specifically, Jacobs also teaches modulating a video signal generator to vary the brightness of the screen to provide light pulses corresponding to binary coded transmitter pulses (Jacobs Col. 3 lines 14 – 17), and sending an address of the receiving device in order for the receiving device to verify if it is correctly receiving information (Jacobs Col. 8 lines 25 – 30). Therefore, it would have been obvious to one of ordinary skill in the art to modulate the brightness of the output signal displayed on the display screen, as taught by both Koplar and Jacobs, to embed an identifier for the receiving device,**

as taught by Jacobs, in order to allow the device to verify the accuracy and reliability of the transfer link prior to initiating information transfer.

b. Regarding claim 5, Koplar teaches all the limitations of the independent claim 1, as set forth in the 102 rejection of claim 1 above. However, **Koplar fails to teach** that the determining means are arranged for obtaining an identifier for the external light source from the extracted frequency components. **Pertaining to the same field of endeavor, Jacobs teaches a similar system for transferring information to a portable device by detecting an external display's video signal containing information embedded by modulation.** Specifically, Jacobs teaches that upon completion of data transfer, the transmitter unit sends its model number along with a checksum. The portable device uses these to verify the accuracy of the data transmission (Jacobs Col. 10 lines 16 – 19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the portable receiver to verify the accuracy of the data transfer by having the transmitting unit identify itself and provide a checksum, as taught by Jacobs.

c. Regarding claim 6, Koplar in view of Jacobs teaches all the limitations of claim 5, as set forth in the 103 rejection of claim 5 above. Koplar also teaches a further light source (Koplar Col. 17 lines 17 – 20 and Col. 18 lines 62 – 65) [Note that the LEDs help to indicate the status of the data transmission]. However, **Koplar fails to teach** an adjusting means for adjusting light emitted by

the further light source in dependence on the obtained identifier. Pertaining to the same field of endeavor, Jacobs teaches a similar system for transferring information to a portable device by detecting an external display's video signal containing information embedded by modulation. Specifically, Jacobs teaches that upon completion of data transfer, the transmitter unit sends its model number along with a checksum. The portable device uses these to verify the accuracy of the data transmission (Jacobs Col. 10 lines 16 – 19). If the portable device detects a successful transmission, verified by the above data, it displays "Transmission Complete", otherwise, it displays "Error" (Jacobs Col. 10 lines 23 – 27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Koplar's LEDs or LCD display to indicate whether or not a transmission error occurred based on the received transmitter model number and checksum, as taught by Jacobs, in order to alert the user of the accuracy of the data and the need to retry or reconfigure the system.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

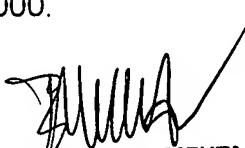
- a. Tognazzini (U.S. Patent No. 7,089,332) teaches a system to wirelessly transfer data between fixed and portable devices, based on the location of portable device in relation to the fixed device's screen.
- b. Edmonds (U.S. Patent No. 7,012,576) teaches a multiple display interface in which the graphics controller transmits to the plurality of displays via a daisy chain such each display re-transmits its input from the graphic controller to the next display in the link.
- c. Zien (U.S. Patent No. 6,864,860) teaches a system to synchronize two devices using video.
- d. Sandstedt (U.S. Patent No. 4,130,738) teaches a bidirectional data transfer system in which a portable device communicates, via radio or near-optical channels, with a fixed device.
- e. Brooksby et al. (U.S. Pg Pub No. 2001/0019321) teaches using the daisy-chain communication concept to connect a plurality of remote meters to a central hub such that one meter can function as a bridge for communication between the hub and another meter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Newman whose telephone number is (571) 270-3016. The examiner can normally be reached on Mon - Thurs from 9:30am to 6:30pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir A. Ahmed can be reached on (571) 272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M.A.N.



BHAVESH M. MEHTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600